

Suisun Resource Conservation District's Suisun Marsh Management Program Update

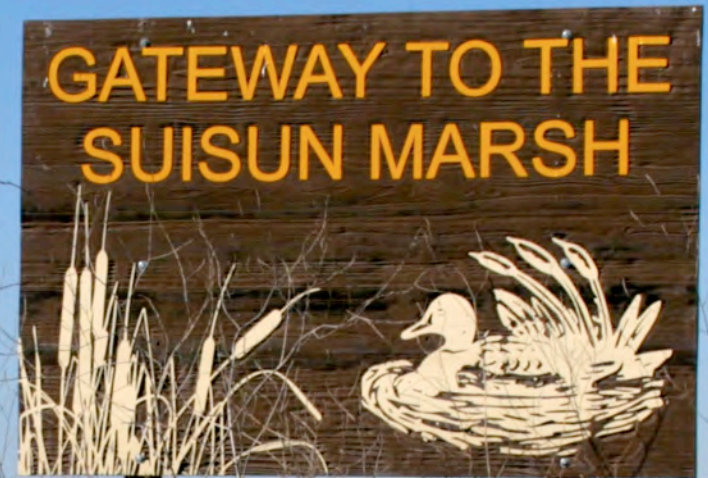


Cody Aichele-Rothman --- BCDC Coastal Planner

May 5th, 2016

Welcome to the Suisun Marsh!

- Where is the Marsh and why does BCDC care?
- Role of BCDC in the Marsh
- What is BCDC doing in the Marsh?



Missing something?



115,100-acre Suisun Marsh

- 52,300 acres of managed wetlands
 - 37,000 acres private
 - 15,300 acres public
- 27,000 acres uplands
- 6,300 acres tidal marsh
- 29,500 acres rivers, bays and sloughs



- The Suisun Marsh is nearly four times the size of the City and County of San Francisco!
- Comprises almost one-sixth of the total area of Solano County.

Brackish Water Marsh

- Where the saltwater ocean meets the freshwater delta
- The most productive type of marsh and support the widest variety of marsh dependent wildlife
- This is the reason the salinity in the marsh shouldn't change



Animal Species Diversity

- Over 221 birds
- Over 40 fish
- 44 mammals
- 9 reptiles
- 6 amphibians



*Not to scale



Plant Species Diversity

Depends on:

- Length of submergence (duration)
- Water depth
- Root zone soil salinities

These are determined by water supply quality and management.



Value of Suisun Marsh

- Largest brackish marsh in the United States
- Contains over 10% of the total remaining natural wetlands in California
- Principal wintering area for Pacific flyway
- Supports 80% of the state's commercial salmon fishery



- Wildlife habitat of nationwide importance!

A Brief History

Tidal
Marsh

Patwin
Tribes



1850's
Agriculture



Post card of Suisun Marsh circa 1910



Duck
Clubs



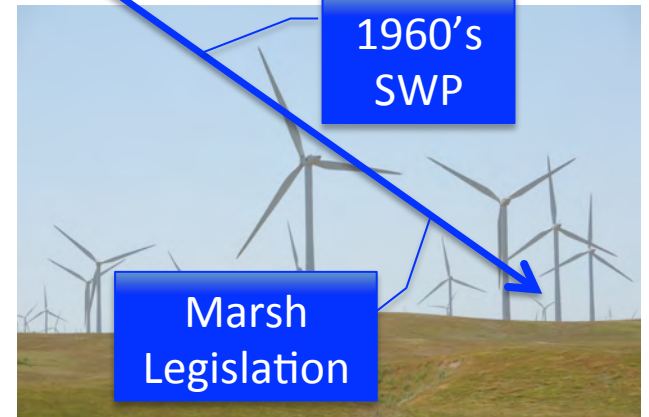
Suisun = West Wind

1930's
CVP



1960's
SWP

Marsh
Legislation





Timeline:

1976 - Suisun Marsh Protection Plan

1977 – Suisun Marsh Preservation Act*

1980 – Suisun Marsh Management Program

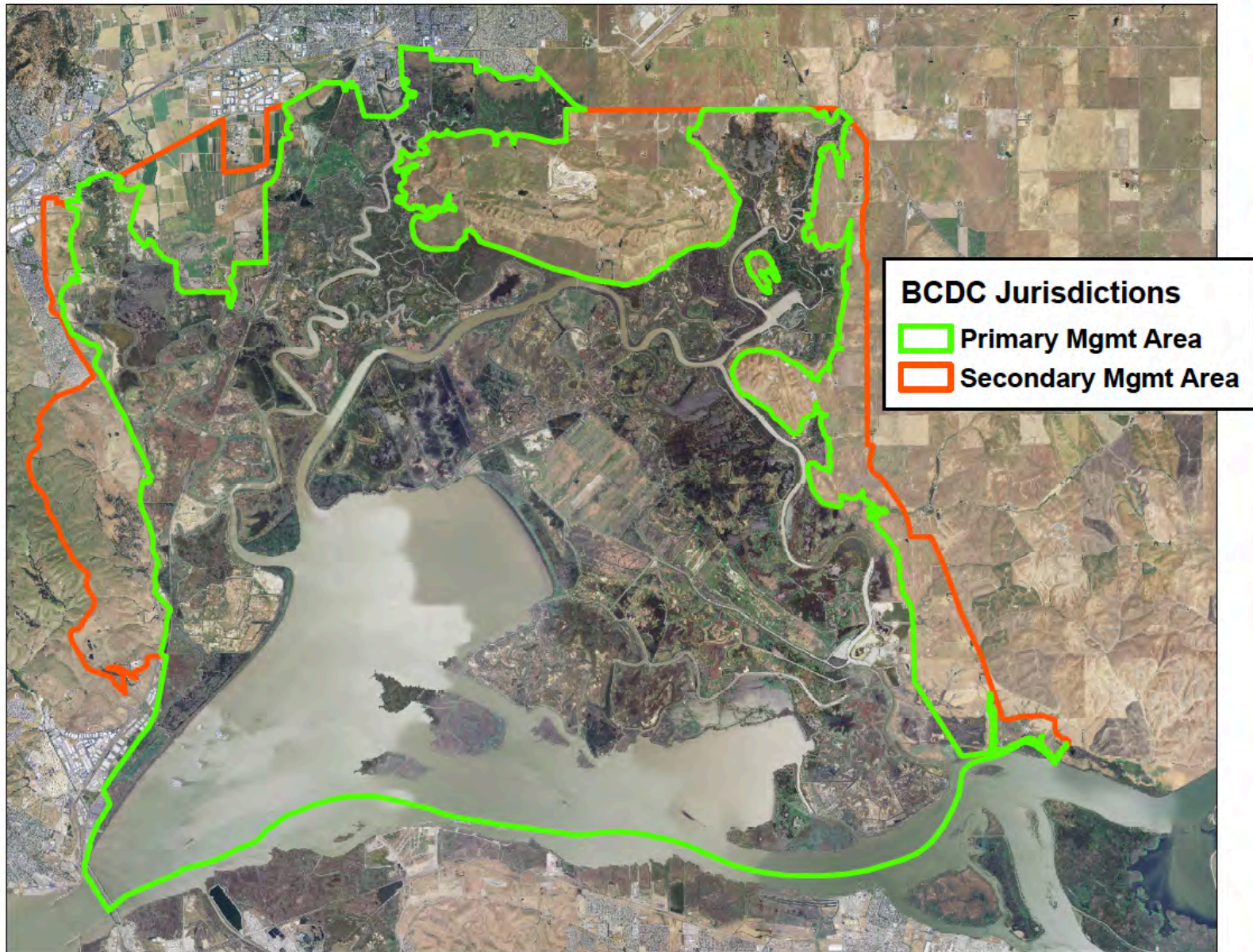
1984 – Individual Management Plans

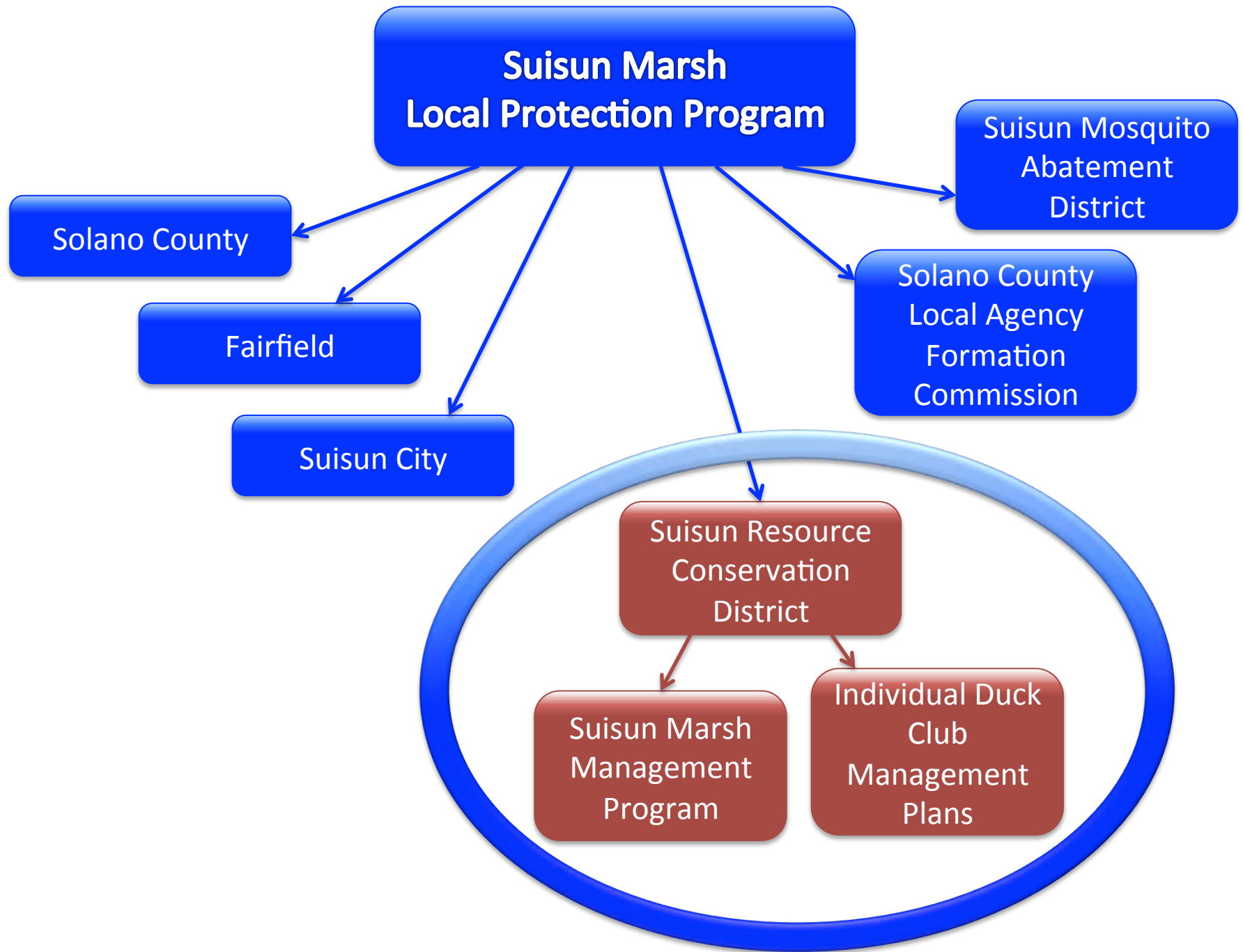
..... 32 years go by.....

***2016 – Suisun Marsh Management Program and
IMP's update***

*requires BCDC to certify all LPPs

BCDC's Role in the Marsh





Key word definitions:

- What is an LPP
 - Local Protection Program – Delegation of authorities to the local governments
 - Updating one actively- Suisun RCD LPP
- What is an IMP
 - Individual management and habitat plan for duck clubs
 - Duck club = managed wetlands
- What is a managed wetland?
 - Growing waterfowl food plants to attract birds
 - Actively manipulating water flow across the properties

What does BCDC need to Accomplish?

- Update and refresh the Suisun Marsh Management Program
- Reinvigorate the 132 Individual Duck Club Management Plans

CLUB #804 SPRIG FARM DUCK CLUB

LAND USE SUMMARY

Flooded area	400 ac.
High ground	130 ac.
Tidal/tule berm	6 ac.
Headquarters	1 ac.
TOTAL	537 ac.

RECEIVED
NOV 15 1984
SAN FRANCISCO BAY CONSERVATION & DEVELOPMENT COMMISSION

PRESENT CLUB CONDITIONS

WATER CONTROL

Water management on this club is a joint effort with the club (#803 - St. Germaine) to the south. There is no levee separating the two properties, and water flows freely between them. With the completion of the Roaring River Slough (RRS) facility, the entire area now floods with the better quality Montezuma Slough water via six flood gates along the northern edge of both clubs. Water generally circulates southward to the four drain gates and pump located along the bay on club #803. The old Royle Slough alignment serves as the primary drainage channel. Because the water control facilities affect both properties, an operations and maintenance agreement is being proposed to assure coordinated management in the future.

VEGETATION

The 1978 Dept. of Fish and Game aerial survey and subsequent field observations a year later indicated an approximate composition of 40% alkali bulrush, 35% pickleweed, 15% tules, and a 10% mixture of annuals and bareground. Improved management and water quality since that time have further increased production of preferred waterfowl food plants to more than 50%.

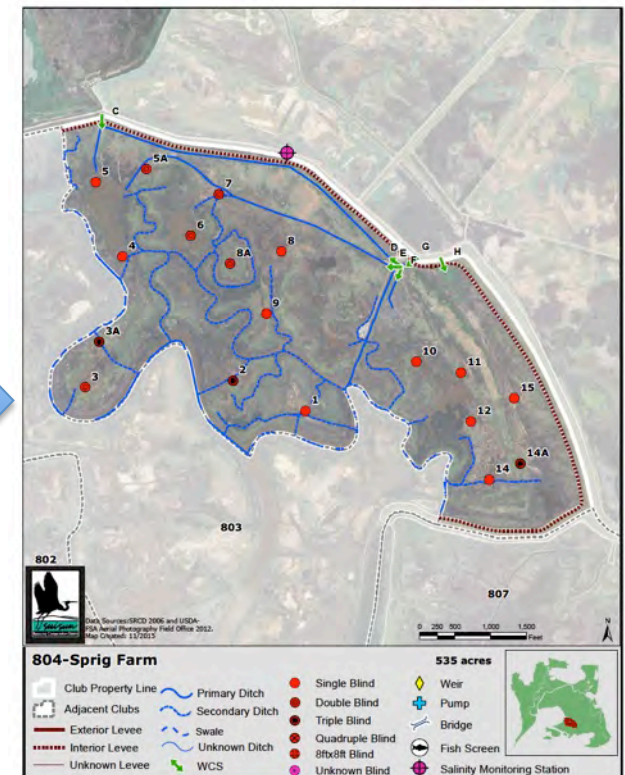
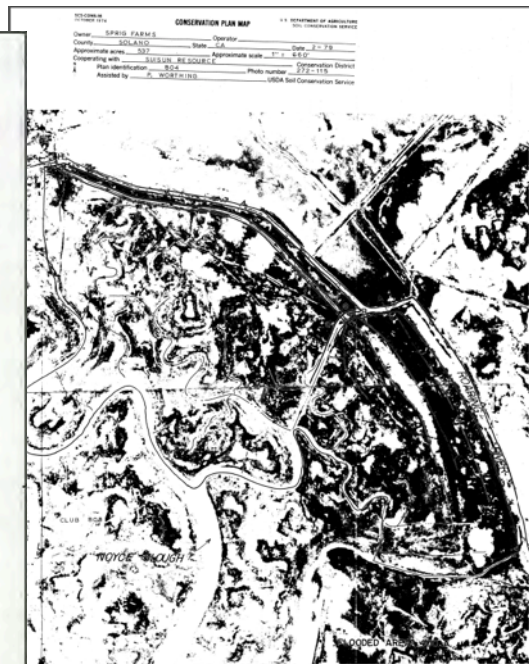
SUMMARY

The habitat on this club is diverse, yet showing an abundance of preferred waterfowl food plants. Continued management according to the alkali bulrush schedule should assure maintenance of a productive wetland. With the installation of a 50 hp. drain pump along the bay, the area should have the capability of performing timely spring leach cycles.

ROARING RIVER SLOUGH PROJECT

The Roaring River Slough facility was designed and constructed by DWR to provide fresher Montezuma Slough water to properties along both sides of its alignment which in the past had to use normally more saline bay water for flooding. Duck clubs south of the facility can now also circulate their water from the Roaring River flood gates to their bay side drain gates and pump.

Roaring River flood gates supplied to the properties were determined by DWR to be sufficient to flood each club within a 10 day period, given a maintained design water level in the facility. However, Roaring River as designed does not have the capacity to flood all the property within its service area at the same time. Preliminary operation of the facility was hampered by construction problems, and several properties had difficulty flooding in a timely manner. With appropriate improvements and operation, the facility should carry a high enough water level to adequately flood the adjacent properties. It will be necessary to devise a cooperative flooding schedule which ensures adequate Roaring River water to all properties concerned.



Suisun Marsh Management Program

- Describes everyday duck club management
- Led by the Suisun Resource Conservation District
- Provides active duck club landowners in the Marsh a set of pre-approved maintenance and management actions that they can undertake



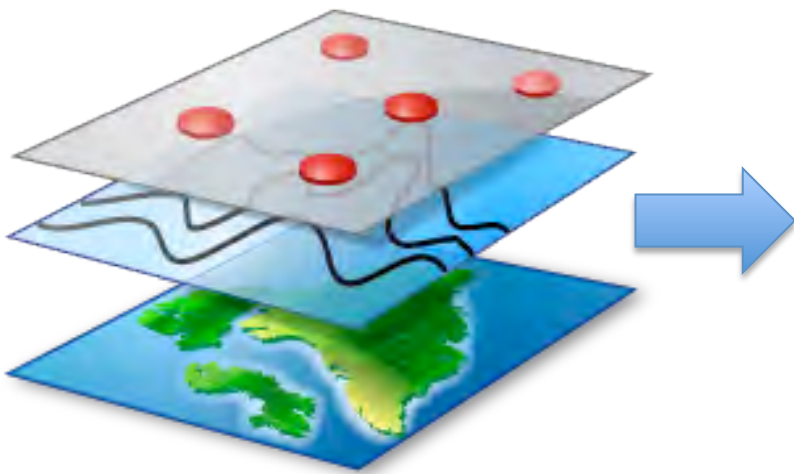
Individual Duck Club Habitat and Management Plans (IMPs)

The goals of wetland management are to attract waterfowl, provide food and habitat, and preserve open space while maintaining hunting opportunities and experiences.

- 132 actively managed duck clubs in the Marsh
- Actively working with SRCD to create useful and effective plans that are more meaningful to the landowners
- Create some common language for all plans
- Move from paper hardcopies (blue folders) to digital files and maps
 - GeoMarsh

GeoMarsh

- New, transparent webtool for all Suisun Marsh stakeholders developed by BCDC
- Data layers consolidated from individual files
- Better tool for managing information



Next Steps:

- Suisun Marsh Management Program review by partner resource agencies and release of final draft – *Late Spring*
- Release of the draft new IMP template – *Early Summer*
- Role of the SCRCD is to collect and organize IMP updated information – *Summer*
- Staff updates for Commission re: Management Program and IMP updates – *Summer and Fall*
- BCDC Certification process for SCRCD LPP – *Fall*

Questions?



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